REMARKS

Claims 1 and 3 through 16, 19 and 20 are pending in the application.

Applicants acknowledge with gratitude the Examiner's indication that Claim 8 is patentable in light of the cited references and will thus be allowed upon entry of the enclosed terminal disclaimer.

Claim 1 has been amended to emphasize that the films of the invention are advantageously formed from a single thermoplastic consisting of polyester which has been selected from the group consisting of polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthalate, and mixtures thereof. Support for this amendment can be found in the Application-as-filed, for example on Page 5, lines 20 – 24.

Claim 1 has further been amended to reflect that the films of the invention advantageously exhibit a yellowness index of less than or equal to 45 for 250 micron films and less than or equal to 20 for 50 micron films. Support for this amendment can be found in the Application-as-filed, for example on Page 4, lines 8 – 9.

Claim 15 has been amended to correct an apparent typographical error.

Claims 17 and 18 were canceled in Applicants' Amendment of May 23, 2002.

Applicants respectfully submit that this response does not raise new issues, but merely places the above-referenced application either in condition for allowance, or alternatively, in better form for appeal. Reexamination and reconsideration of this application, withdrawal of all rejections, and formal notification of the allowability of the pending claims are earnestly solicited in light of the remarks which follow.

Claim Objection

Claim 15 stands objected to due to an informality. Claim 15 has been amended to recite the transitional phrase "comprises," as suggested by the Examiner. Accordingly, Applicants respectfully request withdrawal of this rejection.

Withdrawal of Double Patenting Rejection

Claims 1, 4 through 10 and 16 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting in light of the claims of co-pending Application No. 10/084,028. Co-pending Application No. 10/084,028 has a filing date of February 27, 2002, which is subsequent to the United States filing date of the above-referenced application. As explained in the remarks below, all other remaining objections and rejections should be overcome, thus leaving this provisional rejection as the only rejection pending in this application. Following the guidelines of MPEP § 804(I)(B), Applicants respectfully request that the Examiner withdraw the provisional double patenting rejection in this case and permit Applicants to address the issue of double patenting in the later-filed remaining co-pending Application No. 10/084,028.

The Claimed Invention Is Patentable
in Light of the Art of Record

Claims 1, 3 through 7, 9, 12 through 16 and 20 stand rejected as unpatentable over United States Patent No. 5,660,931 to Kim et al. ("Kim") Claims 10 and 19 stand rejected as unpatentable over Kim in view of United States Patent No. 4,384,040 to von Meer ("von Meer"). Claim 11 stands rejected as unpatentable over Kim in view of United States Patent No. 5,178,943 to Asai et al. ("Asai").

It may be useful to consider the invention as recited in the claims before addressing the merits of the rejection. The claims are directed to opaque white film formed from a single thermoplastic that consists of polyester selected from the group consisting of polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthalate and mixtures thereof. The opaque white films further include barium sulfate, at least one UV stabilizer, at least one flame retardant and at least one optical brightener.

Altogether unexpectedly, as a result of the synergistic action of the combination of various film additives, e.g. the recited barium sulfate, flame retardant, UV stabilizer, and optical brightener, the films of the invention appear whiter, that is, have less of a yellow tinge, than conventional films formed with barium sulfate alone. It was altogether surprising that the inclusion of the recited UV absorber and flame retardant had no significant adverse effect on, but rather improved, the yellowness index of the film, compared with unmodified films. (The Examiner's attention is kindly directed to the Application-as-filed on Page 11, lines 15 – 18).

The films of the invention advantageously exhibit a yellowness index of less than or equal to 45 for 250 micron films and less than or equal to 20 for 50 micron films, as recited in the claims as amended. On a comparative basis, the films of the invention beneficially exhibit yellow indices that are 25% lower than comparable flame retardant white films and 38 % lower than comparable films including barium sulfate alone, as recited in Claim 19. (The Examiner's attention is kindly directed to the Application-as-filed on Page 25, Table 1, Comparative Examples 1 and 2 versus Examples 1 through 3).

Applicants have further determined that by predrying and/or precrystallizing masterbatched flame retardant, it is possible to produce a low-flammability film without any caking in the dryer, and that at exposure to high temperature the film does not become brittle, and does not break when folded. Claim 20 is directed to aspects of the invention incorporating predried and/or precrystallized masterbatched flame retardant, i.e. films that include predried and/or precrystallized masterbatch carrier polymer. In contrast to the

opinion urged within the outstanding Office Action, such a recitation is a product limitation. Predried and/or precrystallized carrier polymer would be expected to exhibit different physical attributes than conventionally processed polymer, in particular decreased moisture content and/or more crystalline structure. Based on empirical observations, Applicants have determined that the presence of such predried and/or precrystallized compositions imparts beneficial processing performance. Applicants make no assertion as to the theory behind the beneficial processing properties resulting from the products of the invention, nor are they required to.

As noted in Applicants Amendment of February 19, 2004, Kim is directed to synthetic paper made from a blend of polyester and polyolefin. Kim further includes inorganic particles within the polymer blend. (Col. 1, line 61 – Col. 2, line 2; Col. 2, lines 32 – 34; and Col. 2, lines 47 – 49.) Kim teaches away from the recited polyester films, as their high densities are said to make them "inconvenient for use." (Col. 1, lines 22 – 26). Kim addressed the issue of elevated polyester density by including polyolefin within the resin blend, making the film more paper-like. (Col. 2, lines 20 – 25).

Kim further notes that the polymeric film may also include a thermal stabilizer, such as a phosphate, a phosphite or hindered phenol. (Col. 6, lines 29 – 31). Kim notes that the thermal stabilizer is capable of increasing the heat resistance of the resin, as cited by the Examiner. (Col. 6, lines 31 – 33). The hindered phenolic thermal stabilizer may be an octyloxybenzophenone. (Col. 6, line 56). In contrast to the opinion alluded to within the outstanding Office Action, Kim does not teach or suggest the incorporation of flame retardant.

Applicants respectfully reiterate that Kim does not teach or suggest the claimed invention. Kim more specifically does not teach or suggest the recited films formed from thermoplastic consisting entirely of polyester, as recited in the claimed invention. In fact, Kim strongly teaches away from such films by requiring the inclusion of an altogether different thermoplastic, i.e. polyolefin.

Kim further does not teach or suggest the recited beneficial combination of barium sulfate, at least one UV stabilizer, at least one flame retardant and at least one optical brightener. And Kim most certainly does not teach or suggest the recited polyester films incorporating such beneficial compositions that further exhibit a yellowness index of less than or equal to 45 for 250 micron films and less than or equal to 20 for 50 micron films.

Kim thus most certainly does not teach or suggest the beneficial yellowness properties recited in Claim 19. Nor does Kim teach or suggest the beneficial embodiments incorporating predried and/or precrystallized flame retardant masterbatch, as recited in Claim 20.

There further would have been no motivation to have even looked to Kim, which is in a different field of endeavor and addresses an altogether different problem.

Kim is directed to paper substitutes that incorporate olefinic polymers. The present invention is directed to polyester films suitable for interior decoration, constructing exhibition stands, and the like. These are altogether different fields of endeavor. Kim further addresses the problem of decreasing the density of conventional films. The present invention improves the yellowness of UV resistant, flame retardant white films. These are altogether different problems, to say the least.

Applicants respectfully reiterate that the absence of polyolefin would actually render Kim's invention inoperable, i.e. not useful as a synthetic paper. Accordingly, there would have been no suggestion or motivation to have made the proposed modification. MPEP 2143.01 (citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

However, even if Applicants had looked to Kim (which they did not do), the claimed invention would not result. In particular, the recited films formed solely from thermoplastic consisting of polyester further including a beneficial combination of barium sulfate, at least one UV stabilizer, at least one flame retardant and at least one optical brightener would not

have resulted, and especially not such films exhibiting a yellowness index of less than or equal to 45 for 250 micron films and less than or equal to 20 for 50 micron films.

Accordingly, Applicants respectfully submit that Claims 1, 3 through 7, 9, 12 through 16 and 20 are patentable in light of Kim, considered either alone or in combination with the remaining art of record.

Claims 10 and 19 are similarly patentable in light of the combination of Kim and Von Meer.

Von Meer is directed to photographic papers coated with a highly pigmented coating. (Col. 2, lines 24 – 30) In contrast to the opinion urged within the Office Action, it is the coating which may include blue, violet or red shading dyes. (Col. 4, lines 19 – 21). Von Meer's coatings are radiation cured, and thus require resins that include a double bond. (Col. 2, lines 60 – 62).

Von Meer, directed to pigmented coatings, does not teach or suggest the claimed white films, much less white films consisting solely of polyester selected from polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthalate, and mixtures thereof. In fact, Von Meer teaches away from such films by requiring polymerizable double bonds within his coating resins.

And Von Meer most certainly does not teach or suggest the claimed white polyester films that further include barium sulfate, at least one UV stabilizer, at least one flame retardant, at least one optical brightener and blue dye, and particularly not such films exhibiting a yellowness index of less than or equal to 45 for 250 micron films and less than or equal to 20 for 50 micron films.

There would have been no motivation to have combined these references. Kim and Von Meer are in different fields of endeavor and address different problems. Kim is directed to synthetic paper. Von Meer is directed to photographic papers. These are altogether different fields of endeavor. Kim seeks to reduce the density of conventional films. Von Meer attempts to improve image definition. These are altogether different problems. Consequently, Applicants respectfully submit that the Office Action is indulging in an impermissible hindsight analysis.

However, even if combined (which Applicants submit should not be done), the claimed invention would not result. Kim requires polyolefin within his films. Von Meer requires the presence of a polymerizable double bond within his coatings. Consequently, even if combined, the claimed films formed from a single thermoplastic consisting of polyester would not result.

Accordingly, Applicants respectfully submit that Claims 10 and 19 are patentable in light of Von Meer, considered either alone or in combination with Kim.

Claim 11 is likewise patentable in light of the combination of Kim and Asai.

Asai is directed to films that include barium sulfate particles and a higher fatty acid metal salt. (Col. 1, lines 4 – 7). Asai teaches the use of higher fatty acid metal salts to form filled films having substantially no difference in surface properties between both film surfaces. (Col. 2, lines 19 – 27). Asai further broadly notes that the films may include other inorganic particles, bleaching agents or dyes. (Col. 4, lines 60 – 66). Asai's films may be used as labels, cards or photographic substrates. (Col. 5, lines 54 – 60).

Asai, considered either alone or in combination with Kim, does not teach or suggest the claimed white polyester films that further include at least one UV stabilizer, at least one flame retardant and at least one optical brightener, and particularly not such films exhibiting

a yellowness index of less than or equal to 45 for 250 micron films and less than or equal to 20 for 50 micron films.

There similarly would have been no motivation to have combined these references. Kim and Asai are in different fields of endeavor and address different problems. Kim is directed to synthetic paper. Asai is directed to films used as cards, photographic papers and the like. These are altogether different fields of endeavor. Kim seeks to reduce the density of conventional films. Kim attempts to provide filled films having the same surface properties on both sides of the film. These are altogether different problems. Consequently, Applicants respectfully submit that the Office Action is indulging in an impermissible hindsight analysis.

However, even if combined (which Applicants submit should not be done), the claimed invention would not result. Kim requires polyolefin within films. Asai is merely directed to the use of higher fatty acid metal salt within filled films. Consequently, even if combined, the claimed films formed from a single thermoplastic consisting of polyester that further includes at least one UV stabilizer, at least one flame retardant and at least one optical brightener would not result.

Accordingly, Applicants respectfully submit that Claim 11 is likewise patentable in light of Asai, considered either alone or in combination with Kim.

The Office Action notes United States Patent No. 6,270,888 to Rutter et al. as pertinent, but not relied on. Out of an abundance of caution, Applicants respectfully submit that Rutter similarly does not teach or suggest the claimed invention.

Statement in Conformance with 37 CRF 3.73(b)

As noted above, a Power of Attorney, appointing Cathy R. Moore as a Practitioner of Record for Mitsubishi Polyester Film, GmbH, is attached. The above-referenced

application has been assigned in its entirety to Mitsubishi Polyester Film, GmbH at Reel/Frame 011773/0677. Copies of the assignment will be forwarded upon request. Accordingly, Cathy R. Moore is authorized to act on behalf of Mitsubishi Polyester Film, GmbH in the above-referenced application.

Conclusion

It is respectfully submitted that Applicants have made a significant and important contribution to the art, which is neither disclosed nor suggested in the art. It is believed that all of pending Claims 1, 3 through 16, 19 and 20 are now in condition for immediate allowance. It is requested that the Examiner telephone the undersigned if any questions remain to expedite examination of this application.

It is not believed that fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional fees are necessary to allow consideration of this paper, the fees are hereby authorized to be charged to Deposit Account No. 50-2193.

Respectfully submitted,

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to facsimile no (703) 872-9306 at the United States Patent and Trademark Office on October 1, 2004.

Claire Wygand

Ms. Claire Wygand